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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Baker et al. Docket No: 39780-2830P1C9
Serial No: 10/006,485 Group Art Unit: 1647
Filed: December 6, 2001 Examiner: Rachel B. Kapust
For: **SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
ACIDS ENCODING THE SAME**

Commissioner for Patents
Washington, D.C. 20231

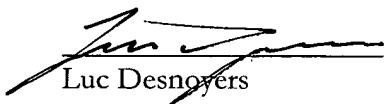
DECLARATION OF LUC DESNOYERS, Ph.D. UNDER 37 CFR 1.131

I, Luc Desnoyers, Ph.D. declare and say as follows:

1. I am scientist at the Molecular Oncology Department of Genentech, Inc., South San Francisco, CA 94080.
2. I am one of the inventors of the above-identified application.
3. I have read and understood the claims pending in this application, and I am aware that the claims have been rejected as anticipated by International Patent Application Publication No. WO 00/00610 (Lal *et al.*, publication date January 6, 2000).
4. I, along with other inventors of this application, conceived and reduced to practice the invention claimed in the above-identified application in the United States prior to January 6, 2000.
5. At the time the present invention was made I was, as still am, responsible for overseeing the testing of novel polypeptides, including the polypeptide designated PRO1412, in chondrocyte proliferation assay (Assay #111, Example 153). This assay is used to find agents that are capable of inducing chondrocyte proliferation and/or redifferentiation, and can, therefore, be used in the treatment of joint diseases using a tissue engineering approach or as promising drug candidates to repair aging or arthritic joints, for example, in which the chondrocytes have been dedifferentiated.
6. In this assay, isolated chondrocyte cells are seeded in 96 well plates with either serum-free medium (no treatment control), or serum-free medium containing the test

PRO polypeptide. After 5 days, fluorescence dye is added to each plate and measured. A positive result in the assay is obtained when the fluorescence of the PRO polypeptide-treated sample is 1.2 fold or higher than the no treatment control. This type of fluorescence determination, wherein the readout is compared to a no treatment control, is well known in the art.

7. A copy of a page from the Genengenes database which reports a positive result for the PRO1412 polypeptide encoded by DNA 64897-1628 (UNQ730) in Assay #111 is attached to this declaration (with its date redacted) as Exhibit A. The positive results reported in the database were also obtained prior to January 6, 2000.
8. Copies of pages from laboratory notebook showing the positive results for the PRO1412 polypeptide (SEQ ID NO:140), identified by Pin number PIN753-1, in Assay #111 are attached to this declaration (with dates redacted) as Exhibit B. These experiments were performed and the results were obtained prior to January 6, 2000.
9. Exhibits A and B clearly show that the polypeptide designated PRO1412 was tested, and its ability to induce the proliferation and/or redifferentiation was determined prior to January 6, 2000.
10. I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information or belief are believed to be true, and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful statements may jeopardize the validity of the application or any patent issued thereon.


Luc Desnoyers

03/25/2004
Date

GENE GENES

GENE VIEWER

SEQUENCE VIEWER

ASSAY VIEWER

GENE [FAM] [MAP] [GENE] [UB] [FLS] [OL]

[RNA] [SRC] [RNA] [UB] [FLS] [OL]

[PRO] [DBM] [EXP] [RUN] [LOT] [ASY]

SITEMAP

Additional Resources:

Go Find

New

Update

SELECT

Go

Assay Viewer

Find Lots

Find Lots

Find Lots

All PIN

All DNA

SHOW LOTS OF

UNQ

Number

730

☐ Include UNQ Related Lots

Clear

Remove

Remove All

PIN753-1

PIN764-1

PIN1210-1

☒ All Positives

☐ Verified Positives

☐ Pending

Date Complete From

To

ASSAY RESULT LIST

Rows 1 to 1 of 1

ASY

ASY Name

PUR/EXP/DNA

LOT

LOT Name

Pbs Verified

Conc

Conc Unit

Mean

Chl

UNQ

Protein Name

Date Complete

Genome

SYN11

Chon Prolif

PUR952

LOT1927

PIN753-1

307.00

nM

1.49

UNQ730

Human GVPT730 Poly-H

ASY [DNA] [DOM] [EXP] [FAM] [FLS] [UB] [LOT] [MAP] [OL] [PRB] [PRO] [PUR] [RNA] [SRC] [UNQ] [XPI] [YSI]

Assay Viewer | Sequence Viewer | Gene Viewer | Genes | SAGE

GenesGenes Feedback

Primary Assay Result

Assay ID ASY111
 Assay Name Chondrocytes Proliferation Assay
 Assay Date _____
 Notebook Num XXXXX-XX

| | 1% | 1% | 1% | 1% | 1% | 1% | 1% | 1% | 1% | 1% | 1% | 1% |
|---|-------------|-------------|-------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| A | Stauroporin | Stauroporin | Stauroporin | PIN717-1 | PIN721-1 | PIN728-1 | PIN730-1 | PIN734-1 | PIN738-1 | PIN742-1 | PIN746-1 | PIN750-1 |
| B | Media | Media | Media | | | | | | | | | |
| C | PIN708-1 | PIN711-1 | PIN714-1 | PIN718-1 | PIN722-1 | PIN727-1 | PIN731-1 | PIN735-1 | PIN739-1 | PIN743-1 | PIN747-1 | PIN751-1 |
| D | | | | | | | | | | | | |
| E | PIN709-1 | PIN712-1 | PIN715-1 | PIN719-1 | PIN724-1 | PIN728-1 | PIN732-1 | PIN736-1 | PIN740-1 | PIN744-1 | PIN748-1 | PIN752-1 |
| F | | | | | | | | | | | | |
| G | PIN710-1 | PIN713-1 | PIN716-1 | PIN720-1 | PIN725-1 | PIN729-1 | PIN733-1 | PIN737-1 | PIN741-1 | PIN745-1 | PIN749-1 | PIN753-1 |
| H | | | | | | | | | | | | |

Fluorescence

Plate #1: Reading after 3 hours

PASTE YOUR RAW DATA BELOW

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|---|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|-------|-------|
| A | 88.1 | 67.1 | 98.4 | 100.4 | 173.2 | 166.8 | 166.8 | 103.1 | 74.4 | 88.0 | 155.6 | 82.1 |
| B | 81.1 | 159.7 | 84.4 | 144.4 | 88.6 | 103.6 | 118.8 | 73.5 | 89.3 | 104.1 | 78.5 | 119.8 |
| C | 85.4 | 91.8 | 89.5 | 89.1 | 88.5 | 64.9 | 80.4 | 56.8 | 67.6 | 58.6 | 83.7 | 107.2 |
| D | 84.6 | 102.4 | 75.6 | 70.8 | 84.7 | 37.2 | 80.2 | 56.4 | 70.9 | 75.3 | 79.5 | 119.6 |
| E | 102.9 | 73.5 | 58.0 | 71.4 | 55.9 | 51.1 | 59.7 | 47.5 | 74.3 | 72.1 | 52.5 | 175.3 |
| F | 89.9 | 102.2 | 80.7 | 131.8 | 84.7 | 83.8 | 78.2 | 88.8 | 68.8 | 81.4 | 84.6 | 180.5 |
| G | 118.0 | 159.3 | 159.3 | 105.5 | 77.5 | 57.6 | 84.6 | 73.5 | 77.2 | 84.9 | 182.5 | 183.7 |
| H | 144.3 | 102.0 | 192.0 | 193.6 | 181.4 | 124.0 | 128.4 | 125.7 | 95.4 | 137.9 | 172.1 | 139.5 |

| Control | Fluorescence |
|-------------|--------------|
| Stauroporin | 84.5 |
| Media | 109.4 |

| Conc | | | 1.00% | | | | |
|----------|-------|-------|---------|-------|----------|----------|----------|
| PIN # | N1 | N2 | AVERAGE | STDEV | Positive | Verified | Comments |
| PIN708-1 | 0.788 | 0.780 | 0.784 | 0.0 | | | |
| PIN709-1 | 0.949 | 0.845 | 0.797 | 0.2 | | | |
| PIN710-1 | 1.070 | 1.331 | 1.201 | 0.2 | | | |
| PIN711-1 | 0.847 | 0.945 | 0.896 | 0.1 | | | |
| PIN712-1 | 0.678 | 0.944 | 0.811 | 0.2 | | | |
| PIN713-1 | 1.162 | 0.941 | 1.052 | 0.2 | | | |
| PIN714-1 | 0.828 | 0.697 | 0.762 | 0.1 | | | |
| PIN715-1 | 0.535 | 0.744 | 0.640 | 0.1 | | | |
| PIN716-1 | 1.489 | 1.771 | 1.620 | 0.2 | Positive | | |
| PIN717-1 | 0.828 | 1.333 | 1.129 | 0.3 | | | |
| PIN718-1 | 0.822 | 0.853 | 0.738 | 0.1 | | | |
| PIN719-1 | 0.859 | 1.218 | 0.938 | 0.4 | | | |
| PIN720-1 | 0.973 | 1.788 | 1.380 | 0.6 | Positive | | |
| PIN721-1 | 1.598 | 0.810 | 1.254 | 0.5 | | | |
| PIN722-1 | 0.632 | 0.597 | 0.614 | 0.0 | | | |
| PIN724-1 | 0.515 | 0.781 | 0.648 | 0.2 | | | |
| PIN725-1 | 0.715 | 1.489 | 1.102 | 0.5 | | | |
| PIN726-1 | 1.537 | 0.956 | 1.246 | 0.4 | | | |
| PIN727-1 | 0.599 | 0.343 | 0.471 | 0.2 | | | |
| PIN728-1 | 0.471 | 0.774 | 0.623 | 0.2 | | | |
| PIN729-1 | 0.532 | 1.144 | 0.838 | 0.4 | | | |
| PIN730-1 | 1.538 | 1.096 | 1.317 | 0.3 | Positive | | |
| PIN731-1 | 0.557 | 0.556 | 0.557 | 0.0 | | | |
| PIN732-1 | 0.551 | 0.722 | 0.636 | 0.1 | | | |
| PIN733-1 | 0.596 | 1.184 | 0.890 | 0.4 | | | |
| PIN734-1 | 0.951 | 0.697 | 0.824 | 0.2 | | | |
| PIN735-1 | 0.522 | 0.520 | 0.521 | 0.0 | | | |
| PIN736-1 | 0.438 | 0.817 | 0.527 | 0.1 | | | |
| PIN737-1 | 0.678 | 1.159 | 0.919 | 0.3 | | | |
| PIN738-1 | 0.686 | 0.824 | 0.755 | 0.1 | | | |
| PIN739-1 | 0.824 | 0.654 | 0.639 | 0.0 | | | |
| PIN740-1 | 0.686 | 0.835 | 0.660 | 0.0 | | | |
| PIN741-1 | 0.712 | 0.980 | 0.798 | 0.1 | | | |
| PIN742-1 | 0.812 | 0.961 | 0.886 | 0.1 | | | |
| PIN743-1 | 0.541 | 0.695 | 0.618 | 0.1 | | | |
| PIN744-1 | 0.665 | 0.751 | 0.708 | 0.1 | | | |
| PIN745-1 | 0.599 | 1.272 | 0.935 | 0.5 | | | |
| PIN746-1 | 1.436 | 0.724 | 1.080 | 0.5 | | | |
| PIN747-1 | 0.588 | 0.733 | 0.661 | 0.1 | | | |
| PIN748-1 | 0.484 | 0.781 | 0.633 | 0.2 | | | |
| PIN749-1 | 1.884 | 1.588 | 1.636 | 0.1 | Positive | | |
| PIN750-1 | 0.757 | 1.105 | 0.931 | 0.2 | | | |
| PIN751-1 | 0.989 | 1.104 | 1.046 | 0.1 | | | |
| PIN752-1 | 1.818 | 1.865 | 1.842 | 0.0 | Positive | | |
| PIN753-1 | 1.895 | 1.287 | 1.451 | 0.3 | Positive | | |

Witnessed & Understood by me,

Date

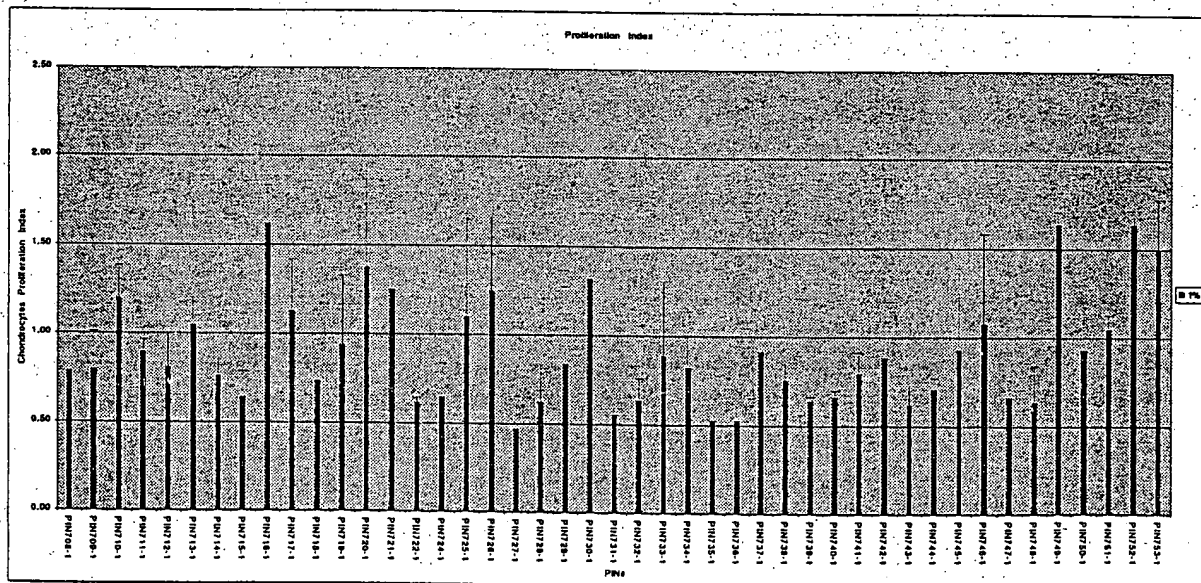
Invented by

Date

Recorded by

GRAPH

| PIN# | Average | STDEV |
|----------|---------|-------|
| PIN708-1 | 0.78 | 0.0 |
| PIN709-1 | 0.80 | 0.2 |
| PIN710-1 | 1.20 | 0.2 |
| PIN711-1 | 0.90 | 0.1 |
| PIN712-1 | 0.81 | 0.2 |
| PIN713-1 | 1.05 | 0.2 |
| PIN714-1 | 0.78 | 0.1 |
| PIN715-1 | 0.64 | 0.1 |
| PIN716-1 | 1.62 | 0.2 |
| PIN717-1 | 1.13 | 0.3 |
| PIN718-1 | 0.74 | 0.1 |
| PIN719-1 | 0.94 | 0.4 |
| PIN720-1 | 1.38 | 0.6 |
| PIN721-1 | 1.25 | 0.5 |
| PIN722-1 | 0.81 | 0.0 |
| PIN723-1 | 0.85 | 0.2 |
| PIN724-1 | 1.10 | 0.5 |
| PIN725-1 | 1.25 | 0.4 |
| PIN726-1 | 0.47 | 0.2 |
| PIN727-1 | 0.62 | 0.2 |
| PIN728-1 | 0.84 | 0.4 |
| PIN729-1 | 1.32 | 0.3 |
| PIN730-1 | 0.58 | 0.0 |
| PIN731-1 | 0.64 | 0.1 |
| PIN732-1 | 0.89 | 0.4 |
| PIN733-1 | 0.67 | 0.2 |
| PIN734-1 | 0.52 | 0.0 |
| PIN735-1 | 0.53 | 0.1 |
| PIN736-1 | 0.92 | 0.3 |
| PIN737-1 | 0.78 | 0.1 |
| PIN738-1 | 0.64 | 0.0 |
| PIN739-1 | 0.66 | 0.0 |
| PIN740-1 | 0.80 | 0.1 |
| PIN741-1 | 0.89 | 0.1 |
| PIN742-1 | 0.62 | 0.1 |
| PIN743-1 | 0.71 | 0.1 |
| PIN744-1 | 0.94 | 0.5 |
| PIN745-1 | 1.08 | 0.5 |
| PIN746-1 | 0.66 | 0.1 |
| PIN747-1 | 0.63 | 0.2 |
| PIN748-1 | 1.84 | 0.1 |
| PIN750-1 | 0.93 | 0.2 |
| PIN751-1 | 1.05 | 0.1 |
| PIN752-1 | 1.84 | 0.0 |
| PIN753-1 | 1.49 | 0.3 |



essed & Understood by me,

Date

Invented by

Date

Recorded by